

WHAT IS CLAIMED IS:

1. Apparatus for manufacturing fluent material receiving members having a fluent material applied thereto, the apparatus comprising:

5 a flexible bag containing the fluent material and having outlets therein from which fluent material may be dispensed; means adapted to receive portions of the bag for metering a charge of fluent material from the bag to plural ones of the receiving members at the same time.

2. Apparatus as set forth in claim 1 wherein said metering means comprises a flow control device adapted to act on the flexible bag to produce flow of fluent material from the outlets in the bag.

3. Apparatus as set forth in claim 2 further comprising a bag squeezing device for moving fluent material in the bag generally toward the outlets.

4. Apparatus as set forth in claim 2 further comprising a conveyor for establishing relative motion between the receiving members and the bag whereby in the reference frame of the bag, the receiving members pass the bag.

5. Apparatus as set forth in claim 4 wherein the conveyor is adapted to move the receiving members under the flexible bag.

6. Apparatus as set forth in claim 1 wherein said receiving members comprise containers, and wherein the apparatus further comprises a forming mechanism for forming an array of containers.

7. Apparatus as set forth in claim 6 further comprising a closing mechanism for closing the containers to hold the fluent material in the containers.

8. Apparatus for manufacturing articles having a fluent material applied thereto from a flexible bag containing the fluent material, the apparatus comprising:

5 a support adapted to releasably hold the flexible bag containing fluent material in position for dispensing to the articles;

a conveyor for moving the articles past the support for receiving fluent material from the flexible bag;

10 a flow control adapted to receive at least a portion of the flexible bag and to deform the bag to produce flow of fluent material out of the bag to the articles.

9. Apparatus as set forth in claim 8 wherein the flow control is capable of squeezing and releasing the flexible bag to produce flow of fluent material.

10. Apparatus as set forth in claim 9 wherein the flow control has multiple receptacles for receiving different portions of the flexible bag to produce flow from the bag out of each of the different bag portions.

11. Apparatus as set forth in claim 10 wherein the flow control is adapted to produce flow in at least one of different rates and different quantities from the different portions of the bag received in different receptacles.

12. Apparatus as set forth in claim 9 further comprising a bag squeezing device for moving fluent material in the bag generally toward the flow control.

13. Apparatus as set forth in claim 8 wherein the articles comprise containers, and wherein the apparatus further comprises a sealing device in line with and downstream of the support for closing and sealing the  
5 containers after they are filled with the fluent material.

14. Apparatus as set forth in claim 13 further comprising a forming device in line with and upstream of the support for forming the containers.

15. Apparatus for manufacturing articles having a fluent material applied thereto, the apparatus comprising:

a flexible bag containing the fluent material and adapted to dispense fluent material to multiple ones of the  
5 articles at the same time;

a support adapted to releasably hold the flexible bag containing fluent material in position for dispensing to the articles;

a flow control adapted to receive multiple portions of  
10 the flexible bag and to deform the bag to produce flow of fluent material out of the bag to plural ones of the articles at the same time.

16. Apparatus as set forth in claim 15 wherein the flow control comprises a pump adapted to dispense predetermined charges of fluent material from the bag.

17. Apparatus as set forth in claim 16 wherein the pump comprises plural receptacles, each adapted to receive a different portion of the flexible bag, first and second spaced apart pinchers associated with each receptacle, each  
5 pincher having an extended position for closing off the bag portion to flow of fluent material past the pincher and a retracted position for opening the bag portion to flow of fluent material past the pincher, the first and second pinchers being adapted in their extended positions to define  
10 the charge of fluent material therebetween, and a shuttle adapted for squeezing the bag portion generally at a location between the pinchers for ejecting the fluent material from the bag.

18. Apparatus as set forth in claim 16 further comprising a bag squeezing device for moving fluent material in the bag generally toward the pump.

19. Apparatus as set forth in claim 15 further comprising a conveyor for transporting the articles past the support and flexible bag held by the support.